Morphophonemic Analysis of Inflectional Morphemes in English and Ibibio Nouns: Implications for Linguistic Studies

Ubong Ekerete Josiah¹ & Juliet Charles Udoudom¹

Correspondence: Ubong Ekerete Josiah, University of Uyo, Uyo, Akwa Ibom State, Nigeria. Tel: 234-803-687-0834. E-mail: ubojos@yahoo.com

Received: April 12, 2012 Accepted: May 31, 2012 Online Published: August 27, 2012

Abstract

Linguists generally acknowledge that there exists an inevitable inter-relationship between different levels of linguistic analysis---phonetics, phonology, morphology, syntax and semantics. Various linguistic labels are used to describe such a link. In particular, there exists a bridge between the phonology and morphology of particular languages. The term "morphophonemics" is generally used to describe linguistic statements that can be made of the phonemic structure of morphemes and their effect on the grammatical content of languages. This paper basically attempts a morphophonemic analysis of inflectional morphemes of nouns in two structurally and historically distinct languages (English and Ibibio) in order to discover points of differences and similarities using the Contrastive Analysis (CA) model of investigation as its theoretical framework. The results indicate that the two languages are structurally different. For instance, Ibibio is agglutinative, tonal and analytic in nature while English is basically analytic and intonational. The paper, therefore, analyzes the problem that the Ibibio speaker of English is likely to encounter in the study of the English word structure. Again, based on its findings, the paper corroborates Greenberg's (1964) and Essien's (2003) classifications of African and Southern Nigerian languages respectively.

Keywords: morphophonemic analysis, inflectional morphemes, English, Ibibio, nouns

1. Introduction

One basic problem which L2 learners usually try to grapple with is the inability to "unlearn" the old linguistic norms of the first language or mother-tongue they acquired earlier before learning the target language (TL). Therefore, it is necessary to identify some problem areas which learners of TL are likely to find difficult. This is the problem this research is attempting to highlight by analyzing the inflectional morphemes in Ibibio and English to indicate those morphological features that may pose learning problems to Ibibio speakers/learners of the English language (cf Lado, 1957).

One general view, which linguists admit of language, is its complex nature. This is why the structural linguist describes language as "a system of systems" or a set of inter-related systems having both the phonological (sound) and the grammatical systems (Dinneen, 1966: 8). Each of these systems has its proper units of permissible combination and order. From these two systems, we can isolate two planes of language analysis which linguists generally acknowledge: phonology and grammar (Gleason, 1969, Tomori, 1977). Phonology deals with phonemes and sequences of phonemes while grammar is concerned with morphemes and their combination into words and larger units (Gleason, 1969). This means that phonemes and morphemes are basic units in linguistics.

At a closer level of analysis, items on the grammatical rankscale: the morpheme, the word, the phrase, the clause, and the sentence, inter-relate. Similarly, items on the phonological rank scale: the phoneme, the syllable, the foot and the tone group equally interlace. Our discussion in this paper indicates that there is an interface between the word and the phonological structures, which ultimately affect the grammar of a language (cf O'Grady, Dobrovolsky and Katamba). One aspect of such a bridge can be illustrated through morphophonemic study.

Using the Contrastive Analysis (CA) method of investigation, this study discusses the morphophonemic structure of inflectional morphemes in both Ibibio and English nouns so as to show points of structural, and possibly, historical differences and similarities between the two languages. Such findings, it is believed, will provide

¹ University of Uyo, Uyo, Akwa Ibom State, Nigeria

reliable insights into the structural content of the two languages, and by so doing, point out the learning problems that Ibibio-English bilinguals may likely encounter in acquiring English as a second language. This will also aid applied linguists in curriculum design for Ibibio learners of English.

1.1 Conceptual Framework

We are here concerned with an analysis which affects both the morphemic and phonemic structure of the two languages used for our study. The terminology "morphophonemic", therefore, implies linguistic statements that describe the phonemic structure of morphemes (Gimson and Cruttenden, 1994). For instance, the source cited here indicates that the morphophonemics of the English plural morpheme involve the alternations of the /s/ allomorph in cats, the /z/ in dogs and the /tz/ in losses. Chomsky and Halle (1968) prefer the expression "phonological representation". But in the present study, we will use the term "morphophonemics" to refer to the sense in which Gimson and Cruttenden (1994) use it above.

The other terminologies we have employed for this study are "inflectional morphemes". Basically, morphology is concerned with the study of morphemes and how they are combined to form words. Two broad divisions of morphological study include lexical and inflectional morphology. Lexical morphology deals with word formation processes such as affixation, back formation, blends, suppletion, compounding, and so on. While inflectional morphology on the other hand marks grammatical categories like number, person, gender, case, tense, mood, voice and aspect (Essien, 1990). Inflectional morphemes, therefore, are those affixes which primarily mark paradigmatic relations among grammatical elements in a language-a paradigm being the system of morphemic variations which is correlated with parallel system of variations in environment (Francis, 1967). This points to what Dinneen (1966) refers to as "covariation" – a functional relation between two things when a change in one is parallelled by a change in the other. More specifically, inflectional morphemes result in changes in the form of a word to indicate strictly grammatical relationships (cf Matthews, 1974). In both English and Ibibio, inflectional morphemes behave much the same way, except for their positions in the word structure, which we shall soon discover in the course of this study.

The other consideration is the concept of Contrastive Analysis (CA). The preoccupation of contrastive linguistics is to compare or contrast from one or more points of view, two or more different languages so as to highlight points of structural and /or historical differences and similarities between them (Crystal, 1994). One basic aspect, which facilitates the goal of comparative linguistics is Contrastive Analysis (CA). This is the branch of linguistic study which employs empirical and synchronic methods in contrasting two or more language structures so as to show points of differences and similarities that can aid language acquisition, especially in a second language learning situation (Bardjowidjojo, 1972, Udondata, 1993). CA is anchored in the doctrine of behaviourism (see Gass and Selinker, 2001). It has strong pedagogical interest, and from all indications as observed by a recent study in Kubota (2010: 271), its goal is to provide useful information for helping L2 learners establish new habits which they cultivated during L1 acquisition. This justifies our resort to this approach since we are comparing the morphophonemics of English and Ibibio inflectional morphemes. The objective is to explore areas which an Ibibio learner/speaker may encounter difficulty in acquiring English as a second language and point them out for pedagogical purposes.

The two languages we are considering for the study are historically and structurally different. For instance, Ibibio (a majority language spoken in Akwa Ibom and part of Cross River States in the Southern part of Nigeria) belongs to the Benue-Congo family of languages (Essien, 1990) while English is historically a member of the Indo-European family of languages (Baugh, 1972). Beyond this Ibibio is structurally agglutinative, tonal and analytic in nature (Essien, 1990) while English is mostly analytic and intonational. Our attempt in this study is to investigate into the nature of morphophonemic alternations that occur with inflectional morphemes in the two languages we are examining here.

1.2 Review of Relevant Literature

Lado (1957) marks the inception of Contrastive Analysis (CA) as an aspect of contrastive linguistics. The work establishes a culture of comparing and contrasting two or more different languages. Since the publication of this work, several other linguists have attempted to examine this concept from different perspectives. Valdman (1966: 287), for instance, highlights the basic role of CA to include: "The comparison of equivalent portions of two languages for the purpose of isolating the probable problems that speakers of one language will have in acquiring the other". Halliday, Mcintosh and Stravens (1964: 121) also note that CA makes possible comparison of "features of different languages with a reasonable degree of accuracy and objectivity"

Quite a number of researchers have experimented on this theoretical tool for contrastive investigations using different languages (cf Nickel, 1969; Corder, 1969; Bardjowidjojo, 1972; Wilkins, 1972; Sanders, 1976; Odlin,

1989; Udondata, 1993; Eka, 1995; Udoudom, 1997; Josiah, 2001; Banjo, 2004; Udosen and Afangide, 2011). The results of such investigations have been described in Major and Kim's (1991) two separate hypotheses: Similarity Differential Rate Hypothesis (SDRH) and Contrastive Analysis Hypothesis (CAH). These hypotheses have drawn the conclusions that, similar phenomena are acquired at faster rates than dissimilar ones; and that, differences between L1 and L2 usually give rise to difficulties respectively (see Major and Kim, 1991: 151-152; Leather, 1991: 26). We intend to examine Ibibio and English inflectional morphemes in the light of these research results before drawing our conclusion.

1.3 Research Problem

Most second language learners encounter various problems while trying to acquire the second or target language, particularly, in nonnative environment. The major influence is usually that of the mother-tongue interference and the sociolinguistic/sociocultural environment where the speaker/learner lives. This problem is surmountable if points of difficulties in the target language are identified. This is the problem this research is attempting to proffer solution to, at least, in a modest way. In particular, the work is interested in isolating points of differences that pose difficulties and those similarities that can facilitate learning of inflectional, grammatical forms that characterize the nominal morphemes in Ibibio and English languages.

2. Method of Investigation

Multiple choice tests were used as the major tool for data collection for the purpose of this research. The test was administered to 70 informants, all of them secondary school students from Junior Secondary 3 (JS 3) to Senior Secondary 3 (SS 3). In all, four classes were involved in the exercise. Twenty test items comprising inflectional forms of nouns were used for the Ibibio data while, for the English data, ten test items were used. The test items for the two languages were designed with the recognition that there is no one-to-one correspondence between English and Ibibio inflectional forms. Again, we adopted the stratified random sampling technique in selecting the informants for the tests in the different classes used. All the tests were recognition tests. They were administered in a classroom situation supervised by the researchers. The tests were designed to evaluate informants' ability to identify patterns of inflection in Ibibio nouns. The weighted score for each of the items was one hundred percent (100%) and simple percentages were used in analyzing the data. All the informants tested were educated Ibibio speakers of English and the same informants were used for both English and Ibibio data. The data below summarily presents informants' performances from the recognition tests conducted.

3. Data Presentation/Analysis

The data for the study are presented on Tables 1 and 2. Table 1 presents informants' performances on the items tested. Three items were examined on Table 1: plurality (which tested number), concord and prefixation in Ibibio. Table 2 assessed informants' performances on plurality, suffixation and case. Each item tested corresponded with the peculiar features of the language studied. The two tables are presented next.

Table 1. Recognition of noun inflections in Ibibio

Numbe	er & Items Tested									General Performance					
S/N	Items			Pe	erformance	Total NA out of 70	% NA out of 70	Total NNA out of 70	% NNA out of 70						
	Measured	JS 3		SS1		SS2		SS3							
		NA	NNA	NA	NNA	NA	NNA	NA	NNA	I	II	III	IV		
1.	Plural Nouns (Number)	15	1	16	2	18	0	17	1	66	94.3	4	5.7		
2.	Concord in Nouns	13	3	16	2	13	5	13	5	55	78.6	15	21.4		
3.	Prefix in Nouns	13	1	17	1	18	0	17	1	67	95.7	3	4.3		

Table 2. Recognition of noun inflections in English

Numb	er & Items Tested									General Performance					
S/N	Items Measured	Performance in Classes Tested									% NA out of 70	Total NNA out of 70	% NNA out of 70		
		JS 3		SS1		SS2		SS3							
		NA	NNA	NA	NNA	NA	NNA	NA	NNA	I	II	III	IV		
1.	Plural Nouns (Number)	15	1	16	2	16	2	17	1	64	91.4	6	8.6		
2.	Suffixation in Nouns	9	7	11	7	11	7	11	7	42	60	28	40		
3.	Case in Nouns	3	13	6	12	10	8	11	7	30	42.9	40	57.1		

3.1 General Remarks on Informants' Performances from the Data Presented

The data presented on Tables 1 and 2 were aimed at testing informants on the recognition of inflectional morphemes in both English and Ibibio nouns so as to discover areas of differences and similarities between the morphological forms of the two languages to be compared. A cursory survey of informants' performance based on the data presented indicates the following. First, f the Ibibio data presented in Table 1 reveals that informants had less difficulty identifying the prefixation process in Ibibio than the rest of the items tested. The general results show that noun inflectional patterns in the Ibibio language did not pose difficulties to informants who participated in the exercise. Again, plural formation was not difficult for informants to recognize. Observably, too, majority of the informants did not find concord marking difficult to identify. For these three items, the percentages of recognition were recorded as 95.7%, 94.3% and 78.6% respectively.

For the English data, we noticed that while informants had less difficulty identifying plural nouns and the suffixation process in English, they had difficulty identifying case marking as the results on the table indicates. The implication is that case marking is not a morphological feature of the Ibibio language. Case is marked syntactically in the language and so informants found this item rather problematic. Since similar features between two language structures facilitate learning while dissimilar ones inhibit it, informants should be given more attention with regards to this item.

3.2 Morphophonemic Analysis of Inflectional Morphemes in English Nouns

In the English language, inflectional morphemes take the form of suffixes. In fact, all grammatical categories in English are indicated through the suffixation process. This is why Francis (1967) remarks that inflectional affixes are all suffixes in English and are capable of marking grammatical functions in the language. Generally, inflectional suffixes are regarded as additive morphemes which serve as variants of the same word rather than separate words as in: book – books – books'.

In English, nouns are inflected to mark pluralization and the genitive case; verbs are inflected to mark person, number, tense, mood, voice and aspect while pronouns are inflected for number, gender, case, and person (Pink and Thomas, 1970; Lamberts, 1972; Tomori, 1977).

The plural noun in English basically comprises the base or stem plus the plural morpheme, as in: girl + s = girls; cat + s = cats; rose + s = roses. Interestingly, a vast majority of English nouns form their plurals by adding an inflectional suffix to the base form. This usually takes various forms as in box – boxes, house – houses, leaf – leaves, knife – knives, lorry – lorries, bus – busses, etc. Sometimes plural formation may involve vocalic change in the base form e.g. man – men, woman – women, goose – geese, ox – oxen, foot – feet, among others (cf Aliyu, 2006: 182-182). This is referred to as mutation process, which results from a simple vowel alternation, especially from back to front vowel in the plural (Lambert, 1972). It is mostly explained from the point of view of diachronic linguistics. We are not considering diachronic investigation in this study.

Some other plural nouns in English occur as zero morphemes (Tomori, 1977). Francis (1967) and Essien (1990) note that nouns in this category have zero allomorph of the plural morpheme and are classed as irregular, since

we cannot predict the sound of the plural on the bases of the singular e.g., sheep – sheep, cattle – cattle, equipment – equipment (see Aliyu, 2006). For the genitive (possessive) case, an "s" suffix is added to the noun base as in: man-man's men-men's. In written form, both the plural and possessive markers remain invariable. But in speech, there are morphophonemic variations. This is what we want to examine here.

Tomori (1977) and Eka (1994) observe that the plural and possessive morpheme marker in English $\{s\}$ is phonologically conditioned and it has three allomorphs, which are /s/, /z/ and /iz/ respectively. A fourth is the zero morpheme /ø/. Several sources explain the occurrence of these morphophonemic phenomena [cf Eka, 1994; Tomori, 1977; Gimson and Cruttenden, 1994; Roach, 1997). Eka (1994), for instance, identifies three sets of the $\{z\}$ morphemes: $\{Z_1\}$, $\{Z_2\}$ and $\{Z_3\}$. Z_1 morpheme refers to the plural morpheme $\{s\}$; $\{Z_2\}$ morpheme is assigned to the possessive morpheme $\{`s\}$, $\{s`\}$ or $\{`\}$; while $\{Z_3\}$ morpheme reflects the concord or tense morpheme with particular reference to verb inflections. This last one is not our focus here.

Eka (1994) clearly accounts for the occurrence of the $\{Z_1\}$ and $\{Z_2\}$ morphemes. With regard to the $\{Z_1\}$ morpheme, the phenomenon can be explained as follows. When the plural morpheme $\{s\}$ is attached to any of the words cat, dog and rose, the final suffix is phonologically conditioned to resemble the sound of the immediate environment. Thus, in realizable parlance, the morpheme $\{s\}$ in cats, dogs and roses will occur in the following sequence: cats /kæts/, dogs /dagz/ and roses /'revzɪz/ respectively. Therefore, the segments /s/, /z/ and /ız/are allomorphs or variant forms of the plural morpheme $\{s\}$. This can be summarily represented thus:

Cat + s - cats /kæts/ = /s/
$$\longrightarrow$$
 [s]
Dog + s - dogs /dagz/ = /s/ \longrightarrow [z]
Rose + s - roses /'revziz/ = /s/ \longrightarrow [1z]

The cases of phonological conditioning illustrated above can be explained as follows. First, when the morpheme $\{s\}$ occurs at the end of a word and is immediately preceded by a voiceless sound other than /s/, then /s/ remains $\{s\}$, as in rats, sacks, reaps. Second, if the plural morpheme $\{s\}$ occurs at the end of a word and is immediately preceded by a voiced sound other than /z, 3,d3/, the /s/ becomes [z], as in dogs, boys, balls. Thirdly, if the /s/ plural morpheme is immediately preceded by /z, 3,d3/, the /s/ changes to /1z/as in roses, busses, losses. Based on these analyses, the segments /s/, /z/ and /1z/are said to be allomorphs of the morpheme $\{s\}$.

Moreso, as indicated earlier, Eka (1994) observes that the fourth allomorph which is not included in the plural morpheme described above belongs to the phonological class usually referred to as zero allomorph, symbolized as /ø/ (cf Essien, 1990). Lamberts (1972) also refers to it as "null" allomorph. Such allomorphs only occur in plural nouns, which have no definite plural markers. Such nouns include sheep, cattle, counsel, equipment, furniture, advice, among others.

Relatively, Eka (1994) notes that the Z_2 morpheme (that is the possessive morpheme) has a distribution similar to the one signified in Z_1 . However, the source observes that the major variations are occasioned by orthographic convention vis-à-vis the position of the apostrophe. Thus the possessive morphemes in words like Margret's /'ma:grets/, men's /menz/ and nurse' /'n3:zrz/ have /s/, /z/ and /rz/as allomorphs of the genitive (possessive) morpheme {s}. Therefore, the phonological conditioning of the possessive morpheme {s} occurs almost in the same way as those explained in (Z_1) .

3.3 Morphophonemic Analysis of Inflectional Morphemes in Ibibio Nouns

Morphological processes vary from language to language. Thus, Ibibio morphological processes may not occur exactly the same way as those of English. This makes it necessary to examine Ibibio inflectional morphemes in this section.

Essien (1990) and Urua (1990) carefully observe that most grammatical properties in Ibibio are indicated through the prefixation process. In particular, Essien (1990: 74) remarks that, "in Ibibio, inflectional morphemes are characteristically prefixes while derivational morphemes are typically suffixes". This appears to be a direct contrast to English inflectional morphemes (Francis, 1967). We have already discussed English inflectional forms in 1.5. Based on our observations in this work, it is necessary to point out that all inflectional morphemes are characteristically prefixes. This provides the insight to our discussion in this section. We will now discuss inflectional patterns as they occur in Ibibio.

One major feature of the Ibibio language is that it is an agglutinative language – that is, it is capable of forming words by adding other words or affixes without changing the form of the root (Essien 1990). This source also explains that languages in this category are made up of morphemes which seem to be "glued together", and are subject to segmentation easily (Essien, 1990: 74). This process helps greatly in describing the patterns of

inflection in Ibibio. For instance, prefixes are attached to noun stems in an agglutinative pattern to show inflectional forms in the language. Such inflections indicate paradigmatic relations between grammatical elements in the language.

One unique characteristic of the Ibibio nouns, like English, is its number system – that is, the formal contrast it makes between its singular and its plural forms. Examples abound in the language. Below are illustrations to show such contrasts.

- 1(a) ákánáwán: "old woman" nkánibáán: "old women"
- 1(b) ákpáráwá: "young man" mkpáráwa: "young men"
- 1(c) óbóón: "chief" mbóón: "chiefs"

In Ibibio, pluralization of nouns occur in six major ways. The processes involved are discussed in Josiah (2001). This is not our major concern in this study. Pluralization in Ibibio involves what Essien (1990) refers to as phonological modifications as indicted in 1 (a, b, c) where there is an alternation of the initial vowel of the base with a nasal sound and an intervocalic change in the root, as in:

Akaánawaán: "old woman" - nkaánibaán: "old women".

One major explanation to Ibibio morphemes involves the juxtaposition of morphological, long with phonological processes. The following Ibibio nouns in 2 (a, b, c, d, e, f) illustrate this point vividly:

- 2(A) édidém: "king": ndìdém: "kings"
- 2(A) àfīãòwò: "whiteman" mfīãòwò: "whitemen"
- 2(c) àbiãibòk: "herbalist": mbiãibòk: "herbalists"
- 2(d) àkpàràwà: "young man" mkpàràwà: "young men"
- 2(e) àtàhaòwò: "useless person": ntààhàòwò: "useless persons"
- 2(f) àkànànwàn: "old woman": nkànibààn: "old women"

In the instances cited in 2(a-f) above, the plural morphemes (n,m,m,m,η) are all prefixes respectively. Besides, these morphemes are homorganic with the following consonants. Thus, /n/ in ndídèm: "kings" is homorganic with /d/ (i.e., both are alveolar sounds); /m/ in mfiáówó: "white men, is homorganic with /f/ (i.e., they are labial sounds), and so on. Relatively, we notice from the examples above that $/m,n,\eta,m/$ are allomorphs of the plural morpheme /n/ in Ibibio nouns."

One other point to mention from the illustrations in 2(a-f) above is that, sometimes, inflectional morphemes in Ibibio involve phonological conditioning. For instance, in the pluralization of the noun 'afiăowa, (i.e., mfiăówă), the labio-dental fricative /f/ of the root 'fiă' changes the quality of the plural morpheme {m} which then assimilates to the voiced labio-velar nasal /m/ (cf Gimson, 1970: vii; Enyong, 1998: 89). This is the case of anticipatory or regressive assimilation (Essien, 1990: 76). From this explanation, we can conclude that inflectional morphology is often enmeshed with phonology (Spencer in Udoudom, 1997). These illustrations imply that Ibibio inflectional morphemes undergo some form of morphophonemic modifications in realizable parlance.

Observably, some plural nouns in Ibibio are indicated syntactically – through the use of the plural marker "mme", and plural adjectives. This process also helps in denoting plurals in what Tomori (1977) refers to as zero morphemes, particularly in nouns which serve both as singular and plural, but which do not have distinct markers for their plural forms. Examples include words in 3(a-b) below; ùfòk, "house" – mme; ùfòk; houses (or mmùfòk); inò: "thief" – mme ìnò (or mminò): thieves. Note that mmùfòk and mminò are variants derived through the process of vowel harmony (cf Essien, 1990).

3.4 Differences between English and Ibibio Noun Inflections

From our discussion on English and Ibibio noun inflections in this section, some major differences become evident. First, Ibibio typically uses prefixes to mark noun inflections, as in 4(a) and 4(b) below:

- 4(a) àsénówó: "stranger" isénówó: "strangers"
- 4(b) édidém: "kings" ndìdém: "kings"

In 4(a) and 4(b) above, the plural morphemes {I} and {n} are prefixes. This thus disagrees with Essien (1990: 91) that in Ibibio, "the plural morpheme is not affixal". On the other hand, English uses mainly suffixes, as in: Plateau – Plateaux; fox-foxes, among others.

The second major difference is that while the possessive case is morphologically marked in English nouns, it is generally a syntactic feature in Ibibio. Thus, Ibibio noun does not inflect for case as the English nouns do.

Another noticeable difference between English and Ibibio inflectional morphemes is that Ibibio adjectives are inflected to mark plural nouns having zero morphemes. On the other hand, English does not use such morphological devices. For instance, English adjectives are not inflected for plural forms. Thus, in Ibibio, we have plural forms as:

- 5(a) mfoón étó: "beautiful (many) trees"
- 5(b) ńtìòwò: "good (many) men", among others. This does not exist in English.

Observably, Ibibio nouns alternate an initial nasal prefix with a vowel prefix to mark plural nouns, as in 6(a) and 6(b) below:

- 6(a) àkpàràwà: "young man" mkpàràwà: "young men"
- 6(b) édidém: "kings": ndìdém: "kings"

This kind of morphological forms is only noticeable in English mutated plurals e.g., man – men; woman – women, etc. English generally adds plural morphemes to the base suffixally. Thus vowel alternation occurs only with mutated plurals in English.

Again, noun paradigms differ in both languages. In Ibibio, the noun paradigms are only two, as in:

- 7(a) àfīāòwò: "whiteman" mfīāòwò: "whitemen"
- 7(b) édidém: "kings": ndìdém: "kings"

But, in English, the noun paradigms are four for both the regular and the irregular forms: ox-ox's-oxen – oxen's: boy-boy's – boys – boys.

Another major difference with respect to noun inflectional morphemes is that, in English, an inflectional suffix can be added to a derivational one, as in: direction + s = directions, where "ion" is a derivational suffix and "-s" is an inflectional suffix with "direct" as the base or root. But in Ibibio, derivational morpheme is an initial prefix, as in:

m-biã – ibòk: "herbalists" comprising an inflectional prefix 'm' plus the derivational prefix "-biã" followed by the root "-ibòk". Thus, we can draw the conclusion that in English, the inflectional morpheme is the last element in the word structure whereas in Ibibio, the inflectional morpheme (which many times undergo morphophonemic changes) is the first element in the word structure.

Finally, we have noticed that phonological conditioning occurs in the plural nouns of both languages; But, while it occurs at word initial position in Ibibio, it takes word final position in English.

3.5 Similarities between Ibibio and English Noun Inflections

Some similarities exist between Ibibio and English noun inflections. The similarities reflect the phonological, morphological and syntactic functions which the two languages perform. First, both Ibibio and English mark inflections affixally, although the positions of such affixes differ in the two languages, for instance, Ibibio uses prefixes as in: àfīãòwò 'a white man' – mfīãòwò: 'white men' while English uses suffixes e.g., boy-boys. Both are affixes.

The second similarity is that both languages exhibit phonological modifications of nominal root morphemes in their formation of plurals. In Ibibio, for instance, we have vowel lengthening which takes the form of vowel doubling, as in 8(a) and 8(b) below:

- 8(a) mbimè: "question": mbiimè:/mbuùme: "questions"
- 8(b) ntùnò: "chastisement / correction": ntuùnò: chastisements / corrections'.

In English, on the other hand, we have vocalic change in the root morpheme, as in: man – men: louse-lice; foot – feet; tooth – teeth' among others. This could be explained from diachronic perspective (Baugh, 1972; Lamberts, 1972).

Another area of similarity between the inflectional morphemes in English and those of Ibibio is the use of suppletion. This is a special type of replacive morpheme formation in which the word changes completely from its base form (cf Tomori, 1997). In Ibibio, this occurs as follows:

- 9(a) òwòwààn: "woman": ibààn: "women"
- 9(b) àyìn: "child" ndito: "children"

9(c) òwòden: "man' iden" men

In English, this occurs as follows: goose – geese; louse – lice; mouse – mice (cf Tomori, 1977).

Another similarity between the inflectional morphemes in the two languages concerns morphophonemic alternations. In Ibibio, for instance, sound change occurs at word initial position, as in: 10 (a) àfiààwò: "a white man" – mfiãówó "whitemen" 10 (b) óboón: "chief"; mboón: "chiefs". In 10 (a) above, the plural morpheme (m) assimilates to the labio-dental fricative /f/ of the root morpheme [-fiã] resulting in the voiced labio-velar nasal /m/ (see Gimson, 1970: vii). In 10 (b), /m/ of mboon is homorganic with /b/, both are bilabial sounds. As could be observed, therefore, morphophonemic modifications in Ibibio nouns involves the allomorphs /m,m,n, ŋ, m/ while in English, it involves the allomorphs /s, z, ız/ respectively.

Also, in both English and Ibibio, zero morphemes in "null" plurals are indicated syntactically. Thus, in Ibibio, we have such construction like mmé étò: "some trees"; mfoòn nwéd: "beautiful books". In English, we notice this development in such expressions like "items of furniture", "pieces of equipment", "and herds of cattle", among others.

Another point of similarity noticed in inflected nouns in the two languages is that the number system is inflected the same way. Thus the singular form marks one while the plural form marks more than one.

We have also noticed in the course of this research that nouns in both Ibibio and English language have plurals which do not have equivalent forms in the singular. For instance, the Ibibio words: ntim: "beatings", ndià: "festivities", ntũanà: "cries" and the English words: "trousers", "scissors", among others, have no equivalent forms in the singular.

Finally, both Ibibio and English plural morphemes maintain concordial relations with other grammatical elements (particularly with the finite verb) in the sentence they occur as evident in the following examples:

- (i) Ibibio: Àkpàràwà àkòòd nwéd: Mkpàràwà ékòòd nwéd.
- (ii) English: The young man reads books: Young men read books

In the example above, the finite verbs àkòòd: "reads" in the two languages are singular and agree with the singular noun àkpàràwà: "young man" while the verbs ékòòd: "read" in both languages are plural and so correspond with plural nouns mkpàràwà: "young men" in the two languages respectively.

4. Conclusion/Implications for Linguistic Studies

We have attempted in this paper to show patterns of morphophonemic modifications that occur in Ibibio and English inflectional morphemes. Using the Contrastive Analysis (C.A) approach as a linguistic tool for our investigation, we have discovered that Ibibio characteristically uses prefixes as inflectional morphemes to mark grammatical categories while English language typically uses inflectional suffixes to mark the same function.

Besides, our analysis has also shown that most grammatical categories in the two languages undergo phonological modifications. In Ibibio, such modifications are used to mark number and person while in English, they specifically mark plurality as well as the genetic case in nouns.

The linguistic implication of this study, as we have observed, is that as languages differ in their structural and historical grouping, so do features in the word structure of such languages differ (cf Essien, 1990; Francis, 1967). The points of differences between inflectional morphemes in Ibibio and those of English and the accompanying morphophonemic alternations occurring in the word base or root can pose learning difficulties to Ibibio learners of English as a second language. These analyses can, therefore, assist language teachers in identifying points of difficulties to learners in second language learning situation, particularly, with regards to Ibibio – English bilinguals.

Another apparent linguistic implication is that languages in the Lower Cross Group of languages such as Efik, Anaan, and others in the southern part of the country such as Igbo, Isoko, Bende, Ijaw, Itsekiri, Kalabari, Ejekam, Bekwara, Yoruba and numerous other closely-related languages and dialects in this region share similar linguistic features: agglutination, reduplication, ideophone, among others. This invariably corroborates Greenberg's (1983) classification of African Languages, and subsequently Essien's (2003) and Ndimele's (2003) earlier classifications of languages and dialects in the Southern part of Nigeria.

References

Udosen, A. E., & Afangide, M. (2011). The Influence of English on the Use of Ibibio Language in Uyo Local Government Area of Akwa Ibom State. In *English Usage in Nigeria since 1842: Patterns and Changes*. A Festscrift in Honour of Professor David Eka.

- Aliyu, J. S. (2006). Upgrading English Achievement. Zaria: Tamaza Publishing Company Ltd.
- Banjo, A. (2004). A Note on Yoruba/English Bilinguals' Phonological Transfers. In Awonusi, S., & Babalola E. A. (Eds.), *The Domestication of English in Nigeria*. *A FestScrift in Honour of Abiodun Adetubo* (pp. 15-19). Lagos: University of Lagos Press.
- Bardjowidjojo, S. (1972). Contrastive Analysis: Pros and Cons. In G. Nickel (Ed.), *Proceedings of Association International de Linguistics Appliques* (pp. 45-57). Heidelberg: Julis Scroos Verlag.
- Baugh, A. C. (1972). A History of English Language. London: Routledge and Kegan Paul Ltd.
- Chomsky, N., & Halle, M. (1968). The Sound Pattern of English. New York: Harper.
- Corder, S. P. (1967). An Introduction to Applied Linguistics. London: Penguin Books Ltd. & Row Publishers.
- Crystal, D. (1994). A Dictionary of Linguistics and Phonetics (3rd ed.). Cambridge: Basil Blackwell.
- Dinneen, F. P. (1966). An Introduction to General Linguistics. London: Holt, Rinehart and Winston, Inc.
- Eka, D. (1994). Elements of Grammar and Mechanics of the English Language. Uyo Samuf (Nigeria) Ltd.
- Eka, D. (1995). Contrastive Analysis and the Teaching of English Pronunciation. In Udofot, M (Ed.), *Current Trends in Educational Practices* (pp. 96-109). Uyo: Imasons Educational Services.
- Enyong, E. E. (1998). A Contrastive Study of Ibibio and English Voiced Consonants. An M. A. Thesis of the University of Uyo, Uyo.
- Essien, O. E. (1990). A Grammar of the Ibibio Language. Ibadan: University Press Ltd.
- Essien, O. E. (2003). Linguistic Variations Among the Small minorities of Akwa Ibom and Cross River States. In Essien, O., & Okon, M. (Eds.). *Topical Issues in Sociolinguistics: The Nigerian Perspective* (pp. 387-402). Port Harcourt: Embai Printing and Publication Co.
- Francis, W. N. (1967). The English Language: An Introduction. London: The English Universities Press Ltd.
- Gass, S. M., & Selinker, L. (2001). Second Language Acquisition: An Introductory Course (2nd ed). Mahwah, N.J.: Lawrence Erlbaum Associates.
- Gleason, H. A. (1969). *An Introduction to Descriptive Linguistics* (Revised Edition). U.S.A. Holt, Rinehart and Winston, Inc.
- Greenberg, J. H. (1964). The Languages of Africa. Bloomington: Indiana University Press.
- Josiah, U. E. (2001). Patterns of Inflection in English and Ibibio: A Contrastive Study. An Unpublished M. A. Thesis of the University of Uyo, Uyo.
- Lado, R. (1957). Linguistics across Cultures. Michigan: University of Michigan Press.
- Lamberts, J. J. (1972). A Short Introduction to English Usage. New York: McGraw-Hill Book Company.
- Nickel, G. (1971). Contrastive Linguistics and Foreign Language Teaching. In Nickel, G. (Ed.), *Papers in Contrastive Linguistics* (pp. 1-16). Cambridge: Cambridge niversity Press.
- Odlin, F. (1989). *Language Transfer: Cross Linguistic Influence in Language Learning*. Cambridge University Press.
- O'Grady, W., Dobrovolsky, M., & Katamba, K. (1996). *Contemporary Linguistics Analysis: An Introduction*. China: Copp Clark Pitman Ltd.
- Pink, M. A., & Thomas, S. E. (1970). *English Grammar Composition and Correspondence*. London: Cassel and Company Ltd.
- Roach, P. (1997). English Phonetics and Phonology (2nd ed). United Kingdom: Cambridge University Press.
- Sanders, C. (1976). Recent Developments in Contrastive Analysis and Their Relevance to Language Teaching. *IRAL*, *14*(1), 67-73.
- Tomori, S. H. O. (1997). *The Morphology and Syntax of Present-Day English: An Introduction*. London: Heimann Educational Books, Inc.
- Udondata, J. P. (1993). English and Anaan Phonological Systems: A Comparative Study. An M. A Thesis of the University of Uyo, Uyo.
- Udoudom, J. C. (1997). English and Ibibio Phonological Systems: A Comparative Study. An M. A. Thesis of the University of Uyo, Uyo.

- Udondata, J. P. (1993). English and Annang Phonological Systems: A Comparative Study. An M. A. Thesis of the University of Uyo, Uyo.
- Urua, E. E. (1990). Aspects of the Phonology and Morphology of Ibibio. A Ph.D Disserttion of the University of Ibadan, Ibadan.
- Utulu, D. C., & Obadan, M. I. (2011). The Phonology Of Ewulu Verbal Reduplication. *Papers in English and Linguistics*, 12, 67-86.
- Williamson, K. (1990). Development of Minority Languages: Problems and Prospects. In Emenanjo, E. N. (Ed.), *Multilingualism, Minority Languages and Language Policy in Nigeria* (pp. 122-127). Agbor: Central Books Ltd
- Wilkins, D. A. (1972). Linguistics in Language Teaching. London: Edward Arnold (publishers) Ltd.